

Enabling Translational Research with caBIG®

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caBIG® Capabilities Enable

Discovery > Translation > Clinical Research

Molecular Medicine

Clinical Research

- Track clinical trial registrations
- Facilitate automatic capture of clinical laboratory data
- Manage reports describing adverse events during clinical trials

Molecular Biology

- Combine proteomics, gene expression, and other basic research data
- Submit and annotate microarray data
- Integrate microarray data from multiple manufacturers and permit analysis and visualization of data

Imaging

- Utilize the National Cancer Imaging Archive repository for medical images including CAT scans and MRIs
- Visualize images using DICOM-compliant tools
- Annotated Images with distributed tools

Pathology

- Access a library of well characterized, clinically annotated biospecimens
- Use tools to keep an inventory of a user's own samples
- Track the storage, distribution, and quality assurance of specimens

caBIG® and Translational Research

caBIG® empowers researchers to see the “BIG” picture by integrating increasingly complex layers of cancer biology, from gene to clinical phenotype, as a whole:

From Gene to Genome to Genomes to Pathways to Clinical Outcomes

All from their computer

Cancer Knowledge Cloud – Grid Services Infrastructure

The core consists of:

- Security
 - Dorian GTs
- Advertisement/Discovery
 - Index Service
- Metadata Management
 - GME Schema Management
 - Vocabularies and Ontologies
 - Common Data Elements
- Workflow
 - Workflow Management Service
- Federated Query
 - Federated Query Service

Connected to this core are medical centers, research centers research units and medical units connected to:

- Analytical Tools
- Biospecimens
- Clinical Trials
- Array Data